Ministry of Advanced Education

2006/07 Annual Service Plan Report

BRITISH COLUMBIA
The Best Place on Earth

National Library of Canada Cataloguing in Publication Data
British Columbia. Ministry of Advanced Education.
Annual service plan report. — 2002/03 –

Annual.
Continues: British Columbia. Ministry of Advanced Education Annual report.
ISSN 1703-3594.
ISSN 1705-8872 = Annual service plan report — British Columbia. Ministry of Advanced Education
1. British Columbia. Ministry of Advanced Education — Periodicals. 2. Postsecondary education — British Columbia — Periodicals. 3. Postsecondary education — Government policy — British Columbia Periodicals. 4. Technical education — British Columbia — Periodicals. 5. Technical education — Government policy — British Columbia — Periodicals. I. Title. II. Title: Ministry of Advanced Education ... annual service plan report.

LC176.2.B7B74 353.8'8'0971105 C2003-960099-8

For more information on how to contact the British Columbia Ministry of Advanced Education
see Ministry Contact Information on Page 43 or contact:

Ministry of Advanced Education
PO BOX 9883
STN PROV GOVT
VICTORIA B.C.
V8W 9T6

or visit our website at
http://www.aved.gov.bc.ca

Published by the Ministry of Advanced Education

Message from the Minister and Accountability Statement

It is my pleasure to present the Ministry of Advanced Education *2006/07 Annual Service Plan Report.*

This is an important time for advanced education in British Columbia. With a booming economy, an aging population and low rates of unemployment, we need skilled people to fill the record number of new jobs being created.

Our goal is to enhance all of our post-secondary education and training systems — to make sure no unnecessary barriers stand in the way of students in this province or in the way of the future prosperity of British Columbia. This is one of the reasons we have embarked on the biggest expansion of our public system in 40 years.

We promised to create 25,000 student spaces by 2010, and we have already funded more than 11,800 of those seats, with 4,394 added in 2006/07. Many of these new spaces are focused on areas that address future skills shortages like doctors and nurses, and trades and technical sectors.

We're supporting these new spaces with a record investment of more than $1 billion for capital expansion projects since 2001 — $267 million invested in 2006/07 alone — creating new buildings, state-of-the-art labs, classrooms and lecture theatres across B.C.

British Columbia's public universities are among the most affordable in Canada today, giving our students greater access to education. Our comprehensive student financial assistance program continues to help thousands of students every year. The majority of students graduating from post-secondary programs in B.C. report that they are finishing with no debt.

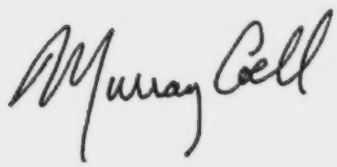
Government-supported research, innovation and technology provide a long-term contribution to a strong and vibrant economy. Since 2001, we have invested over $1.5 billion in research and leveraged more than $900 million in added funding from other sources. Research at universities has led to the creation of well over 200 spinoff companies.

We have continued to fulfill our commitment to make adult literacy and developmental programs offered in the public post-secondary system a priority. Last year our investments included about $57 million for adult basic education and $5 million for our adult basic education student assistance program.

We are also increasing spending to help Aboriginal students succeed in post-secondary education. Since 2001, the Ministry of Advanced Education has provided about $11 million to fund 222 Aboriginal special projects, which have benefited more than 3,900 Aboriginal learners.

Every dollar we spend is an investment in the future of our province, country, and society. Every space we add is an investment in our students, in our economy, in our province and our future.

The Ministry of Advanced Education *2006/07 Annual Service Plan Report* compares the actual results to the expected results identified in the Ministry's *2006/07 – 2008/09 Service Plan*, published in February 2006. I am accountable for those results as reported.



Honourable Murray Coell
Minister of Advanced Education
and Minister Responsible for Research and Technology

June 13, 2007

Table of Contents

Message from the Minister and Accountability Statement 3

Highlights of the Year 7

Purpose of Ministry 10

Strategic Context 13

Report on Performance 17

Performance Plan Summary Table 17

Goals, Objectives, Strategies and Performance Results 19

Report on Resources 39

Resource Summary 39

Ministry Expenses by Core Business 42

Ministry Contact Information 43

Annual Service Plan Report Appendices 44

Appendix A 44

Appendix B: Report on Accountability Framework Measures 45

Highlights of the Year

— Increased overall funding for the Ministry by $70 million in 2006/07, for a total of $1.98 billion in operating funding.

— Improved student access by adding 4,394 new spaces in 2006/07. Together with new spaces from previous years, this marks progress of 11,811 new spaces towards the Strategic Investment Plan goal of 25,000 new spaces by 2010. Since 2001, a total of 17,668 new spaces have been funded.

— Increased student spaces in targeted programs, including more than 500 new spaces for nursing, almost 200 new spaces in allied other health education, and 96 new medical school spaces.

— In partnership with the Ministry of Health, supported an increase in practice placements for students enrolled in health programs by doubling funding for the Practice Education Innovation Fund to $6 million, and increasing opportunities for students to have high quality experiences in practice settings around the province.

— Provided a $5 million grant to the Trades Training Consortium of B.C. to buy updated equipment benefiting trades training students at public post-secondary institutions.

— Continued to strengthen research capacity at B.C. public post-secondary education institutions by awarding $32 million in funding for research infrastructure under the B.C. Knowledge Development Fund, and leveraging $104 million from the federal government and other non-government sources. Total investment in research infrastructure in the province was $136 million.

— Through the British Columbia Innovation Council, provided $1.7 million to the B.C. Regional Science and Technology Network to support member councils that help build the technology sector outside the lower mainland.

— Provided $5 million to establish the Wireless Innovation Network Laboratory to support the commercialization of promising communication and wireless technologies.

— Allocated $20 million to create new graduate student scholarships and internships.

— Increased the B.C. student loan limit by $30 a week for post-secondary students with dependents, with a corresponding increase to loan reduction funding.

— Implemented the Master Student Loan Agreement[1] and online application for the BC Student Loan Interest Relief program.

[1] Once-only student loan agreement. Enrolment is confirmed by the school, and the Student Loan Service Bureau electronically deposits the student's B.C. student loan funding into their designated account.

— Completed development of the Pacific Leaders program.[2]

— Sent loan default rates information to all presidents of post-secondary institutions.

— Approved 38 new degree programs at B.C. public post-secondary institutions and eight new degree programs at private post-secondary institutions.

— At the end of the year, there were 521 private post-secondary institutions offering over 4,000 registered career training programs in British Columbia; 206 of these institutions were accredited by the Private Career Training Institutions Agency.

— For the third straight year, increased funding to $2 million for 30 new projects to help Aboriginal students throughout B.C. succeed in post-secondary education.

— Provided $1.4 million under the Community Adult Literacy Program for 47 adult literacy programs, such as one-on-one tutoring and group learning activities, which are aimed at enhancing the education and training of British Columbians so they can reach their potential and reap the advantages of B.C.'s strong economy.

— Organized and hosted the Council of Ministers of Education, Canada Forum on Adult Literacy in June 2006 at the University of Northern British Columbia, where common solutions to low literacy skills among 40 per cent of adult learners were discussed.

— Launched the Campus 2020: Thinking Ahead initiative, designed to build on the strengths of B.C.'s post-secondary education system while discovering new approaches to expand the network of learning opportunities across the province.

— Proclaimed a new mandate for the Knowledge Network, establishing it as British Columbia's educational public broadcaster, and appointed a new board to lead the network in fulfilling its new role.

— Invested $15.5 million in Simon Fraser University Surrey, giving students in B.C.'s fastest-growing region access to a world-class university that will also support the local and provincial economies through innovative research and teaching.

— Opened Malaspina University-College's Faculty of Management building, with all management training programs under one roof, simulating modern business settings.

— Committed up to an additional $6 million for Camosun College's Pacific Sport Institute to help construct a new venue and training centre for national and international athletes.

— In partnership with the Canada Millennium Scholarship Foundation, and in consultation with the Ministry of Education, developed and co-funded Perspectives, a learning resource tool to help students take charge of their futures by planning their post-secondary education, and featuring an interactive DVD.

[2] The Pacific Leaders program will give the B.C. Public Service a competitive edge in recruiting and retaining top employees for the future. Part of the program consists of graduate student fellowships for research related to government priorities and areas of current and future skills shortages; loan forgiveness for employees who work in the public service for three years; and scholarships for the further education of member of the public service and their children.

— Launched the Off-Campus Work Permit program, allowing eligible foreign students studying in B.C. to gain experience in B.C. workplaces and bringing their skills and knowledge to the province.

— Created new website — http://www.learnlivebc.ca — and a companion DVD, so prospective international students can learn more about B.C.'s world-class post-secondary education system and high standard of living.

Purpose of Ministry

The Ministry of Advanced Education works with students, the post-secondary education system and research and technology sector by: providing leadership, direction, and coordination; establishing policy; and providing operating and capital funding. Access to post-secondary education is supported by the Ministry with financial assistance and a variety of grants and merit-based scholarships for eligible British Columbians. The public benefits of post-secondary education include providing people with knowledge, skills and training that communities, employers and entrepreneurs need, as well as enabling citizens to pa ipate in all aspects of society. The public benefits of research and innovation include the economic activity and jobs created through commercialization and the expansion of knowledge.

The majority of public services for which the Ministry is responsible are delivered by institutions and organizations within the public post-secondary system and the research and technology sector. Various mechanisms are in place, such as legislation, funding agreements and reporting requirements, to ensure accountability for public funds.

Public post-secondary institutions in British Columbia, like those in other provinces, have a significant degree of autonomy from government in many areas. This autonomy allows institutions the necessary independence to determine how to meet the needs of their students, their communities and the province effectively. These institutions develop and deliver programs and courses, provide education and training to students, undertake research, and serve the educational needs of their communities.

The balance between institutional autonomy and the need for government to address post-secondary priorities is maintained through "An Accountability Framework for British Columbia's Public Post-Secondary Institutions." The Framework supports funding agreements and reporting requirements that emphasize outcomes or results. The Ministry consults with representatives from public institutions to ensure that performance measures targets are reasonable while reflecting government's priorities. Expectations are communicated to institutions in annual budget and accountability letters, which outline Ministry funding to be provided and performance measures targets. Public institutions allocate Ministry funding as they consider necessary to meet their targets, and provide the Ministry with information needed to ensure accountability for results and use of public funds. Each year, institutions also issue three-year service plans to inform the public of their goals, objectives, measures and targets, and annual reports to inform the public of the results achieved. The Framework was reviewed in 2006/07 to assess its current operation. Options for future development are being considered.

The internal and external governance and accountability structures for most public post-secondary institutions are set out in legislation. The legislation provides for boards of governors with responsibility for operational and financial matters. Statutes also outline academic

governance structures with responsibility for decisions concerning academic matters such as credentials, curriculum and standards. See Appendix A for a list of legislation administered by the Ministry.

In addition to public post-secondary institutions, British Columbia also has a diverse private post-secondary sector that offers a range of education and training programs including degrees, career training, and English as a Second Language. Unlike their public counterparts, private post-secondary institutions are not funded by the Ministry. However, the Ministry establishes policy and legislative frameworks for private post-secondary institutions, through the *Private Career Training Institutions Act.* In 2006/07, there were 521 registered private institutions offering over 4,000 registered career training programs in B.C.

The Ministry also supports the Degree Quality Assessment Board, which administers a quality assessment process for new degree programs at public and private post-secondary institutions. In 2006/07, nine private and out-of-province public institutions had consent to offer degree programs under the *Degree Authorization Act.*

The Ministry's expanded mandate for research and technology includes oversight of the following initiatives: funding contributions to provincial research organizations such as Genome British Columbia; internship funding for graduate students; the Premier's Technology Council; research funding, for example, to the British Columbia Knowledge Development Fund and Leading Edge Endowment Fund; and inter-ministry collaboration and partnership on research initiatives. Research-related initiatives under development are also overseen by the Ministry.

The Ministry oversees the British Columbia Innovation Council and the Knowledge Network. The purpose of the Council, a Crown agency, is to expand innovation by providing a one-stop point of access and support to high technology companies, educational institutions, technology industry awareness groups, federal science and technology agencies and university research labs. The purpose of the Network, as the province's public educational broadcaster, is to promote lifelong learning through unique, quality educational programming, and to foster growth in the province's home-grown media sector by collaborating with independent television and web media producers.

The Ministry provides direct service to the public through administration of the StudentAid B.C. Program. The Program provides loans and grants to eligible post-secondary students for education and living costs so that post-secondary education is financially accessible to all British Columbians. The Program is a needs-based, publicly-funded program created to help eligible students with the costs of post-secondary studies while enrolled at public and designated private institutions. Also administered are: merit-based scholarships; bursaries targeting labour market demands; other programs on behalf of the federal government and other provincial ministries and agencies; and the Canada Millennium Scholarship Foundation Bursary. The Ministry is also responsible for ensuring the loans it provides are repaid by the students once their studies are completed. As a result, it expects designated institutions to focus

on student success — avenues to retain students until the completion of their program and to ensure their overall employability is improved. The Ministry monitors default rates as part of its obligations under the Pan-Canadian Designation Policy Framework, which is in place to address taxpayer protection, accountability, informed choice and consumer protection for government student loans.

Strategic Context

The Ministry, and higher learning, research and innovation systems, function within the broader demographic, social and economic environment. This section of the report provides an overview of the major trends and resulting challenges and opportunities that influence the post-secondary education system, and research and innovation development. Key trends include the increased growth and diversity of the population, economy and labour market, as well as continuing technological advancements.

Population Growth

Continued growth and diversification of British Columbia's population is increasing the demand for a broad array of post-secondary education opportunities. According to the 2006 Census, the provincial population is over 4.1 million, which represents an increase of 5.3 per cent over the level reported in the 2001 Census. This increase in population surpasses the growth rate experienced between the 1996 to 2001 Census (4.9 per cent). It also exceeds the population growth rate of all other provinces, except Alberta and Ontario. British Columbia's population is expected to grow between 2007 and 2031 by over 28 per cent.

Within the province, most regions experienced some population growth over the level reported in the 2001 Census. Exceptions are some areas in the northwest, southeast and central areas of the province. A challenge will be to ensure that learners have the opportunity to pursue post-secondary learning in their region.

However, as population growth and economic opportunity is uneven across regions, the demand for post-secondary education will continue to vary across the province, which will lead to capacity challenges across the system. For example, growth is expected to be much higher in the Kwantlen, Fraser Valley and Malaspina college regions than in the Kootenays or the North. A challenge will be to ensure a continued post-secondary presence in communities facing declining populations.

Population Diversity

The impact of natural increases on population growth will continue to decline due to population ageing and low fertility rates. As a result, growth in B.C.'s population is expected to continue to be driven by migration. Immigration, especially from Asia, will continue to be the major source of population growth in the province. Between 2005 and 2031, international migration is expected to account for over 60 per cent of population growth while inter-provincial migration will account for about 40 per cent.

As this trend towards an increasingly diversified population is expected to continue, the challenge will be to provide the types of learning opportunities that are responsive to the needs of immigrants as well as international students. For instance, the demand for English as a Second Language programs is likely to increase as more and more international students and immigrants originate from non-English speaking countries.

Strong Economic Growth

British Columbia's economy is performing at an exceptional level. Growth in GDP for 2006 is estimated to have been 3.6 per cent. Strong consumer spending and investment helped make British Columbia's economic growth rate the second highest among provinces in 2006, behind Alberta. B.C.'s economic growth was accompanied by a marked drop in the unemployment rate and strong personal income growth. We have the lowest unemployment rate (4.8 per cent) and the lowest youth unemployment rate (8.2 per cent) in 30 years.

Employers will continue to be confronted by productivity growth issues, which will require continued investment in their workforces. The need to raise productivity will provide opportunities for the post-secondary education system to work with employers to develop relevant skills-upgrading programming, particularly in technical and applied technology fields. The system will be challenged to maintain participation rates. Changes to traditional education to work patterns mean that more youth are forgoing further education to enter the labour market, and are finding jobs due to the limited availability of skilled workers.

Demand for Skilled Workers

As the provincial unemployment rate continues to decline and some sectors of the economy operate at historically high levels, demand has increased rapidly for skilled workers. Industry sources have identified shortages in certain high-skilled fields, including health care professions, as well as other occupations in sectors such as construction and hospitality. Communities in rural and northern parts of the province have also experienced difficulty in attracting and retaining labour. The need to increase the availability of qualified workers will continue to challenge the post-secondary system to produce sufficiently trained workers in a timely response to labour market needs.

At the same time that the demand for skilled labour is increasing, B.C. is experiencing an increase in the size of the pre-retirement population cohort. Recent population projections indicate that by 2010, the population cohort leaving the workforce will exceed the population cohort entering the workforce. The post-secondary system will be challenged to meet the skills development requirements of the labour market. The aging workforce and retirement trends will impact the availability of experienced workers in many professional and skilled trades occupations.

Aboriginal people represent a significant potential source of skilled labour. Between 1996 and 2001, the Aboriginal population grew by 22 per cent, and represented five per cent of the total provincial population. However, Aboriginal educational attainment levels have remained below levels for non-Aboriginal population. Improving the educational attainment of the Aboriginal population will improve employment outcomes. As the Aboriginal population continues to grow, post-secondary programming will need to be more flexible and culturally responsive to ensure that relevant skills training is available to Aboriginal learners.

Looking to the future, labour market projections suggest there will be increased demand for workers with some post-secondary education. In 2005, 65 per cent of the employed labour force in B.C. had at least some post-secondary education. By 2015, over 70 per cent of the employment openings will require post-secondary education. The system will be challenged to increase provincial production of post-secondary credentials as the province's historic and ongoing pattern of attracting large numbers of skilled migrants may not be sufficient to meet its future demands.

Improving adult literacy is a priority for British Columbia. Current research from the 2003 International Adult Literacy and Life Skills Survey indicates the adult population residing in British Columbia has tended to score above the national average in literacy competence. However, there still remains a significant portion of the adults in the province with low levels of literacy, and overall literacy skills are not improving significantly.

There are a number of individual, social and economic benefits to improving literacy skills. For example, a study conducted by the C.D. Howe Institute[3] demonstrated that a one per cent increase in literacy skills among Canadians would drive annual sustainable Gross Domestic Product growth of 1.5 per cent ($18.4 billion). Statistics Canada also reports functional literacy has been found to improve employment stability and performance in the labour market. Similarly, higher literacy levels have been found to positively impact income patterns. In order for British Columbia to create a highly skilled, productive workforce, a key challenge will be to develop effective strategies for increasing literacy levels among the adult learner population.

Research and Innovation

Like all jurisdictions, British Columbia's competitiveness and standard of living depend heavily on productivity growth and international competitiveness. Productivity growth is key to a thriving economy; and the revenues that a strong economy generates are essential to support health care, an aging population, education, and child care.

[3] "Public Investment in Skills: Are Canadian Governments Doing Enough?" October 2005. http://www.cdhowe.org/pdf/commentary_217.pdf

The provincial economy is becoming more diverse and more knowledge-based, which means greater reliance on research and innovation for growth. Research and innovation intensive industries, including clean technology, life sciences, high technology, new media and engineering, are critical to the growth, competitiveness and continued diversification of the British Columbia economy. Post-secondary institutions, research institutions, private sector and the provincial, federal and local governments all have an important role to play in the development of research and innovation. Given the relative scarcity of large companies and corporate headquarters, British Columbia must distinguish itself by its ability to foster growth-oriented entrepreneurial enterprises.

The BC Progress Board states that innovation and commercialization are the principal determinants in productivity growth over time, not only in direct productivity increases through use of new technology, but also in future human capital development. The B.C. Competition Council, in its June 2006 report, states that "research and development leading to innovation and then commercialization — the ability to transform and use knowledge and turn it into marketable goods and services — is essential for increasing our value added and productivity, thereby, raising the standard of living of British Columbians."

Report on Performance

Criteria for Evaluating Performance

The Ministry has developed four descriptions to evaluate performance, they are:

- Exceeded (10% or more above the target);
- Achieved (up to 10% above the target);
- Substantively achieved (90% or more of the target);
- Not achieved (less than 90% of the target).

Performance Plan Summary Table

Goal 1: Excellent public and private post-secondary education that meets the needs and aspirations of British Columbians. For greater detail see pages 19 to 33.	**2006/07 Target**	**2006/07 Actual**
1.1 Capacity		
Student spaces in public institutions:[1]		
Total spaces	177,246	169,577 Substantively Achieved
• Student spaces in computer science, electrical and computer engineering	7,950	6,273 Not Achieved
• Student spaces in nursing and other allied health programs	10,956	11,591 Achieved
• Student spaces in medical school programs	776	804 Achieved
Total credentials awarded	48,102	48,618 Achieved
1.2 Access		
Public post-secondary participation rate for population aged 18 – 29	52.4% – 53.3%	53.7% Achieved
Post-secondary students who are Aboriginal:		
• Number	≥ 16,466	17,252 Achieved
• Per cent	≥ 4.4%	4.3% Substantively Achieved
Student spaces in developmental programs[1]	12,454	11,826 Substantively Achieved

Goal 1: Excellent public and private post-secondary education that meets the needs and aspirations of British Columbians. For greater detail see pages 19 to 33.	2006/07 Target	2006/07 Actual
1.3 Efficiency		
Degree completion rate:		
• Percentage of university direct entry students who complete baccalaureate degrees within 7 years of admission	≥ 74.1 %	73.0 % Substantively Achieved
• Percentage of university transfer students who complete baccalaureate degrees within 5 years of admission to university	≥ 75.2 %	73.3 % Substantively Achieved
1.4 Quality		
Student assessment of quality:		
Overall satisfaction		
• Former diploma, certificate and associate degree students	≥ 90 %	95.1 % Achieved
• Baccalaureate graduates	≥ 90 %	95.8 % Achieved
Skill development		
• Former diploma, certificate and associate degree students	≥ 85 %	79.9 % Substantively Achieved
• Baccalaureate graduates	≥ 85 %	82.5 % Substantively Achieved
1.5 Relevance		
Student outcomes — unemployment rate		
• Former diploma, certificate and associate degree students	≤ 7.6 % [2]	6.3 % Exceeded
• Baccalaureate graduates	≤ 7.6 % [2]	3.9 % Exceeded

Goal 2: Excellent research and innovation that supports economic and social development . For greater detail see pages 34 to 38.	2006/07 Target	2006/07 Actual
2.1 Research Capacity		
Sponsored research funding from all sources:	Total ≥ $495 M	$507 M Achieved
• Federal	≥ $248 M	$299 M Exceeded
• Provincial	≥ $ 90 M	$36 M Not Achieved
• Other	≥ $157 M	$172 M Achieved

Goal 2: Excellent research and innovation that supports economic and social development. For greater detail see pages 34 to 38.	2006/07 Target	2006/07 Actual
British Columbia proportion of federal awards	≥ 10.6 %	12.2 % EXCEEDED
Highly qualified personnel:		
• Number	≥ 17,881	19,391 ACHIEVED
• Number per 1,000 population	≥ 4.2/1,000	4.5/1,000 ACHIEVED
2.2 Research Relevance Number of licences, patents and start-up companies:		
Licence/option agreements	≥ 63	53 NOT ACHIEVED
U.S. patents issued	≥ 26	38 EXCEEDED
Start-up companies	≥ 9	11 EXCEEDED
Licence income received	≥ $14.6 M	$15.6 M ACHIEVED

[1] The student spaces measures are calculated as Full-Time Equivalent (FTE) student spaces. The targets are the spaces that the Ministry funds, and the actuals are the spaces that are filled at the institutions.

[2] 2006 B.C. unemployment rate for those aged 18 – 29 with high school credentials or less.

Goals, Objectives, Strategies and Performance Results

Goal 1: Excellent public and private post-secondary education that meets the needs and aspirations of British Columbians

Objective 1.1: Capacity

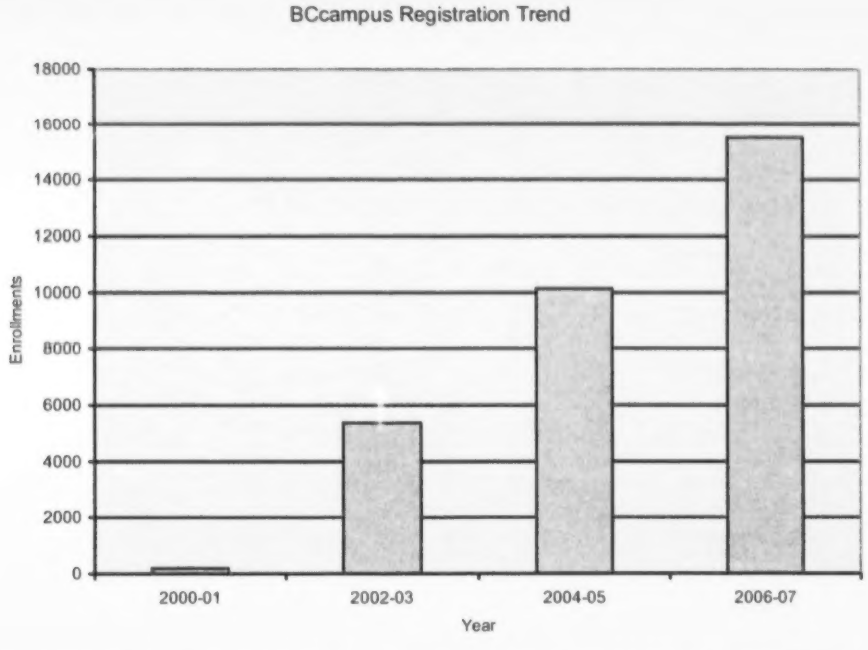
- Achieving this objective will ensure that there is enough space to accommodate students who wish to pursue post-secondary education, in line with the government's goal of making British Columbia the most literate, best-educated jurisdiction on the continent.
- Challenges associated with this objective are ensuring spaces are available when they are needed; matching operating, capital and financial aid capacity at the right place and time; the regional variation in demand for programs; and how a strong economy affects people's decisions on whether or not to attend programs.

Strategies

- **Implement Strategic Investment Plan.** 2006/07 was the third year of the original Strategic Investment Plan to add 25,000 additional student spaces by 2010. The Plan is designed to increase the public post-secondary participation rate which will support key economic and social priorities of the province. During the year, the Ministry funded 4,394 new spaces which were added across the province (a 2.5 per cent increase in total space) to support the estimated increase of more than 9,700 individuals in the 18–29 cohort population (a 1.4 per cent increase in the cohort) and respond to labour market needs. Government provides more than $1.5 billion in operating funding to public post-secondary institutions in 2006/07.
- **Monitor university direct entry and transfer student entrance Grade Point Average cut-offs.** Reductions in the average admissions requirements among B.C.'s public universities are contributing to achieving the 2010 targets. The university admissions Grade Point Average cut-off for direct entry into Arts and Science programs in fall 2006 was 81 per cent. This is the same as last year.
- **Target spaces to meet strategic skill needs.** Student spaces continued to be dedicated to programs that educate students in strategic skill areas — computer science and electrical and computer engineering programs, nursing and allied health programs, and undergraduate medical education. As well, $1.1 million in provincial start-up funding was provided for a new medical laboratory technologist program at the College of New Caledonia in Prince George, enabling students to learn closer to home.
- **Use technology to assist in delivery.** BCcampus continued its implementation plan to increase access to and choice of post-secondary learning opportunities to learners in B.C. New technologies are being installed at all public post-secondary institutions to facilitate the seamless transfer of student information across the institutions, enhancing the ease of credit transfer and hence, student mobility. Enrollments continued to grow during this period.

As well, the Post Secondary Technical Advisory Committee for PLNet,[4] together with their K-12 counterparts, began work on a long-term plan for network upgrades. An expanded PLNet will support learners taking advantage of online learning opportunities by providing the mechanism to enable the delivery of more support services, such as online academic and financial aid advising, online bookstore services, virtual library services and online learner communities for student interaction.

[4] All public schools, colleges, university colleges and institutes are connected to a single provincial network, PLNet.



- **Ensure campus facilities meet growth requirements.** New or expanded facilities may be needed with the addition of student spaces. Key capital expenditures for 2006/07 for a total of over $267 million included:
  - — $14 million to College of the Rockies for expansion to its academic and trades facilities for a total project cost $16.5 million.
  - — $14.2 million to University College of the Fraser Valley for the acquisition of Canadian Forces Base lands and for building renovation to create a Trades & Technology Centre.
  - — $14.4 million to University of Northern British Columbia for a Teaching and Learning Centre.
  - — $14.7 million for the expansion of David Lam Campus at Douglas College for a Health and Sciences building.
  - — $13.2 million to Langara College for a new library/classroom expansion.
  - — $12.4 million to Vancouver Community College for an expansion to its King Edward Campus.
  - — $20.8 million for expansion and updating of buildings at Kwantlen University College's Surrey campus.
  - — Provided public post-secondary institutions with an additional $70.2 million for annual capital allowances.

- **Enhance system-wide strategic planning.** A review of "An Accountability Framework for British Columbia's Public Post-Secondary Institutions" was completed in 2006/07. While the report acknowledged B.C.'s post-secondary education accountability framework as among the best, it offered recommendations for improvement. These are being considered.

Performance Results

Performance Measures	2004/05 Actual	2005/06 Actual	2006/07 Target	2006/07 Actual
Student spaces in public institutions: Total student spaces	166,247	169,243	177,246[1]	169,577 Substantively Achieved
Student spaces in computer science, electrical and computer engineering programs	6,317	6,129	7,950[1]	6,273 Not Achieved
Student spaces in nursing and other allied health programs	10,111	10,797	10,956[1]	11,591 Achieved
Student spaces in medical school program	586	698	776	804 Achieved

Data Source: Post-Secondary Institutional Audited Full-Time Equivalent Reports. Refinements were made to the specific targets in 2006/07. See Appendix 2 of the Ministry *2007/08-2009/10 Service Plan* for updated targets. http://www.bcbudget.gov.bc.ca/2007/sp/ae/ See also Technical Note #1 at the end of the Goals, Objectives, Strategies and Performance Results section for more information.

[1] Due to refinements of targets in 2006/07, the targets footnoted above were updated after the 2006/07 Service Plan was published. The originally published 2006/07 Service Plan targets were: total student spaces 177,657; student spaces in computer science, electrical and computer engineering programs - 8,007; student spaces in nursing and other allied health programs - 10,850.

Discussion of Results

The outcome being assessed by this measure is progress towards the target of funding 25,000 additional spaces (Full-Time Equivalents) by 2010 and how BC public post-secondary institutions are meeting these Full-Time Equivalent targets. The planned addition of 25,000 student spaces by 2010 reflects both growth in the 18–29 year-old population and strong labour market demand for post-secondary training and education. An expansion of this magnitude requires significant effort and planning over the next few years to ensure sufficient facilities, faculty, programming and student services are put in place. The Pro nce and institutions are working together to manage this expansion in an effective and efficient manner. 2006/07 was the third year of the plan.

The 2006/07 result indicates the extent to which BC public post-secondary institutions are meeting Full-Time Equivalent targets overall, as well as in fields with projected workforce shortages: 1) computer science, electrical and computer engineering; 2) registered nursing, licensed practical nursing, resident care aide and other allied health occupations; and 3) medicine.

The total spaces target for student spaces was substantively achieved. 169,577 spaces were delivered for a utilization rate of 95.7 per cent. Much of the initial growth was targeted at the university sector to address immediate challenges relating to higher-than-average student admission grade point average requirements. Progress has been made at the majority of universities. In 2006/07, the university sector continued to exceed its Full-Time Equivalent target, though by less of a margin than in previous years due to increased demand for more costly graduate spaces. Institutes also show strong Full-Time Equivalent production, producing at or over Full-Time Equivalent targets. Colleges and university colleges are showing less favorable results. Regional demographics, the state of the job market, and lead time to implement new programs, delivery models, and facilities all influence the level of student activity. The Ministry monitors and assesses utilization rates under the Strategic Investment Plan on a regular basis to identify any long-term challenges associated with the seven year Full-Time Equivalent targets.

The student spaces in nursing and other allied health programs and spaces in medical school program targets were both achieved. 11,591 spaces were delivered in nursing and other allied health programs for a utilization rate of 105.8 per cent. The medical school program delivered 804 spaces for a corresponding utilization rate of 103.6 per cent. However, the target in computer science, electrical and computer engineering was not achieved. 6,273 seats were delivered for a utilization rate of 78.9 per cent. The technology sector has experienced labour market fluctuations in recent years, and this is a contributing factor as to why student demand has not kept pace with the increase in student spaces.

Ministry Response

The Ministry monitors and assesses utilization rates under the Strategic Investment Plan on a regular basis to identify any long term structural challenges associated with the Full-Time Equivalent targets. Reallocations to targets were made in 2006/07 and 2007/08 based on softening enrolment in some areas of the province due primarily to improved economic conditions and higher than anticipated demand in other areas.

The change in Audited Full-Time Equivalent Report deadlines (from June 30 to May 15) to accommodate Service Plan Reporting deadlines, has resulted in a possible loss of Full-Time Equivalents being counted toward the targets. Institutions run on an academic year and their final Full-Time Equivalent figures reported on May 15th does not always capture all activity. It is estimated that the May 15th report undercounts by approximately 1.5 per cent – 2 per cent.

Government's strategy to double the number of degree graduates in computer science, electrical and computer engineering will address expected labour market demand in these areas. The targets were established on the basis of a joint proposal from The University Presidents' Council of British Columbia and the British Columbia Technology Industries Association, and subsequent discussions with the Council, British Columbia Institute of Technology and individual university colleges. A total of 3,410 student Full-Time Equivalents are required to double the number of graduates (compared to 2001/02) in the targeted academic programs. Results this year

suggest that institutions continue to face challenges filling all of the funded seats in these areas. British Columbia is expected to see growth in the industry in the coming years, which should lead to increased utilization rates in the future. The Ministry will continue to monitor trends in these programs and where necessary, develop strategies to assist institutions in meeting student and employer needs.

Performance Results

Performance Measure	2004/05 Actual	2005/06 Actual	2006/07 Target	2006/07 Actual
Total credentials awarded	46,189	47,737	48,102	48,618 ACHIEVED

Data Source: Ministry of Advanced Education, Central Data Warehouse and The University Presidents' Council of British Columbia database. See also Technical Note #2 at the end of the Goals, Objectives, Strategies and Performance Results section for more information.

Discussion of Results

All students who fulfill program requirements at public post-secondary institutions are entitled to a formal qualification — either a degree, diploma, or certificate. The purpose of this measure is to assess the system's capacity to meet student demand and to ensure sufficient numbers of graduates. Consistent with the last four years' results, the 2006/07 target was achieved. It was found that credential output is a function of system capacity (based on physical capacity and the level of funding available). Therefore, as of the *2005/06 Service Plan Update,* the new method for setting credential targets incorporates institution Full Time Equivalent growth. In line with the continuous achievement of credential targets, the Ministry has been expanding system capacity by increasing funding to institutions and increasing the targeted number of student Full Time Equivalents. Other factors that may affect credential output include: personal, social and economic factors that directly affect students' participation in and completion of programs, and institution business practices and enrolment management policies and procedures.

Objective 1.2: Access

- Achieving this objective will ensure that opportunities are available for students to pursue post-secondary education throughout the province.
- Challenges associated with this objective are ensuring that barriers are minimized and consideration of shifts in the composition and size of B.C.'s population. Barriers include financial and geographic limitations. Shifts include increasing migration to B.C. and an increase in the Aboriginal population. A significant number of those migrating are new immigrants with at least a baccalaureate level of education, but whose first language is not English. This has an impact on the demand for English as a Second Language education. Growth in the Aboriginal population highlights the need for culturally sensitive programming.

It also increases the need for supports to assist Aboriginal learners make the transition from secondary education to post-secondary education, an important step in post-secondary education participation. Such supports are important, as well, for children from families without a history of post-secondary education.

Strategies

- **Maintain affordable post-secondary education through fair tuition policy.** In 2006/07, government limited tuition fee increases to the rate of inflation. As well, StudentAid BC improved and better publicized the supports available to students experiencing difficulty repaying loans. Customer satisfaction surveys continue to guide the development of programs to assist students in repayment.
- **Provide student financial aid, including incentive programs related to specific occupations and geographic regions.** The Ministry assisted approximately 55,000 students for a total of $219 million in loan assistance. An additional $137 million was available through targeted programs, such as scholarships and bursaries, grants and the Student Loan Reduction Program. An additional $2 million was added this year to grant funding for adults who are upgrading their basic education, including English as a Second Language training. As well, $10 million was provided to endow Aboriginal scholarships.
- **Develop and fund initiatives for specific populations through developmental programs.**[5] The Ministry funded 47 programs through the Community Adult Literacy Program for a total of $1.4 million. These programs reached approximately 5,500 British Columbians. The Adult Basic Education Student Assistance Program was funded for $5.7 million, including a one-time disbursement for books, supplies, transportation, and unsubsidized child care costs. An Adult Opportunities Action Plan, aligned with the Provincial Literacy Action Plan known as ReadNow, is being developed, and includes a number of initiatives being worked on in collaboration with stakeholder groups and other ministries. The Ministry and Ministry of Education are moving forward in discussions about more integrated delivery of programs and services to adult learners through the public post-secondary and school district systems.
- **Develop and fund initiatives for Aboriginal learners.** In 2006/07, the Ministry provided $2 million to fund 30 new projects through Aboriginal Special Project Funding.[6] These projects helped public post-secondary institutions promote culturally sensitive educational programs and support activities for Aboriginal learners. Since 2001, the Ministry has provided about $11 million to fund 222 Aboriginal special projects, from which more than 3,900 Aboriginal learners have benefited. As well, $1.4 million was provided for Aboriginal Service Plans, funding up to 10 post-secondary education institutions to develop

[5] Adult Basic Education, English as a Second Language, and Adult Special Education.

[6] The primary purpose of the Funding is to increase participation, success and retention rates for Aboriginal learners in B.C.

three year Aboriginal Service Plans.[7] The Aboriginal Post-Secondary Education Strategy was completed in 2006/07. The strategy addresses barriers to education by increasing access and participation through financial support to students and institutions, improving literacy skills, and creating culturally relevant programs that will help Aboriginal students succeed in post-secondary education and beyond.

Performance Results

Performance Measure	2004/05 Actual	2005/06 Actual	2006/07 Target	2006/07 Actual
Public post-secondary participation rate for population aged 18 – 29	53.2%	52.3%	52.4% – 53.3%	53.7 % ACHIEVED

Data Source: Ministry of Advanced Education, Central Data Warehouse, The University Presidents' Council of British Columbia database , and the population data from BC Stats Population Extrapolation for Organization Planning with Less Error. See also Technical Note #3 at the end of the Goals, Objectives, Strategies and Performance Results section for more information.

Discussion of Results

The purpose of this measure is to provide context for efforts to increase capacity and improve access at a pace that exceeds population growth for the 18 – 29 year-old cohort — the population considered to be most representative of post-secondary students. This measure also provides an indication of the level of demand for post-secondary education in B.C. and whether the system has been successful in meeting that demand. The 2006/07 target was achieved. This is only the second year of data for this performance measure, due to operational redefinition. Previously, Statistics Canada data was used but was not available yearly. The current results show that although the provincial economy is still exceptionally robust, there has been an increase demand for post-secondary education in the 18 to 29 year-old cohort.

[7] Aboriginal Service Plans are three-year service plans, developed by institutions and Aboriginal communities in the areas institutions serve, which outline goals for Aboriginal learners in terms of access, participation, and success and identifies specific actions to be implemented to meet these goals.

Performance Results

Performance Measure	2004/05 Actual	2005/06 Actual	2006/07 Target	2006/07 Actual
Public post-secondary students who are Aboriginal:				
Number	16,108	16,466[1]	≥ 16,466	17,252 ACHIEVED
Per cent	4.3%	4.4%	≥ 4.4%	4.3 % SUBSTANTIVELY ACHIEVED

Data Source: Ministry of Advanced Education, Central Data Warehouse, The University Presidents' Council of British Columbia database, and Ministry of Education administrative records. See also Technical Note #4 at the end of the Goals, Objectives, Strategies and Performance Results section for more information.

[1] The 2004/05 and 2005/06 results have been adjusted from previous years to reflect more current data.

Discussion of Results

The outcome being assessed is the level of Aboriginal student participation in public post-secondary education, both in total number and per cent of all public post-secondary students. The target for number of students was achieved. The target for per cent of students was substantively achieved; the reason for the slight decrease was stronger growth of overall student population by headcount (6.9 per cent) than Aboriginal population by headcount (4.8 per cent). The benchmark of maintaining or increasing over the previous year was chosen because of the desire to continue progress of closing the post-secondary education participation gap. In general, a healthy trend has been demonstrated since the ministry started tracking the per cent of public post-secondary students who are Aboriginal in 2002/03.

Performance Results

Performance Measure	2004/05 Actual	2005/06 Actual	2006/07 Target[1]	2006/07 Actual
Student spaces in developmental programs	12,096	12,371	12,454	11,826 SUBSTANTIVELY ACHIEVED

Data Source: Ministry of Advanced Education, Central Data Warehouse, and The University Presidents' Council of British Columbia database. See also Technical Note #5 at the end of the Goals, Objectives, Strategies and Performance Results section for more information.

[1] Due to refinements of targets in 2006/07, the target footnoted above was updated after the 2006/07 Service Plan was published. The published 2006/07 target was 12,793.

Discussion of Results

The outcome being assessed for this measure is whether the public post-secondary education system was able to meet the Full Time Equivalent target for developmental programs. The target was substantively achieved. 11,826 Full Time Equivalent spaces were provided for a utilization rate of 95 per cent, similar to 2004/05, while in 2005/06 the rate was 100.7 per cent. Student demand for developmental programs fell in a number of areas in the province in 2006/07. While some institutions reported that fewer students accessed fundamental level courses because income support changes for those who study, others said improvements in local economies led to more full-time employment for people who might otherwise seek to upgrade their skills.

New Measure

A new measure of affordability was developed in 2006/07, as committed to in the *2006/07 Service Plan*. This measure is "Ratio of median debt to median income of graduates," and was included in the *2007/08 Service Plan*. Data will be presented in the *2007/08 Annual Service Plan Report*.

Objective 1.3: Efficiency

- Achieving this objective will ensure students are able to progress through the post-secondary system and complete university courses and programs in a reasonable amount of time.
- Challenges associated with this objective include reducing entry barriers due to geography and finances, and ensuring student mobility through a comprehensive transfer system that supports students.

Strategies

- **Facilitate transfer into and between post-secondary institutions.** The Ministry provides funding and support to the B.C. Council on Admissions and Transfer.[8] The Council encourages public and private post-secondary institutions to develop policies and practices regarding the transferability of post-secondary credit courses, so that credit granted at one institution can be applied toward credentials at other institutions. The Council publishes the Education Planner and the B.C. Transfer Guide, which list program offerings and course transfer details at post-secondary institutions in B.C.
- **Support Prior Learning Assessment.**[9] The Ministry continued to support Prior Learning Assessment activity at institutions through its block funding process.

[8] The Council works with post-secondary education institutions to facilitate transfer arrangements among public and private institutions.

[9] Institutions offer this service which allows a student to earn credit toward courses or programs if the student can demonstrate knowledge or skills equivalent to what would normally be acquired through conventional studies.

Performance Results

Performance Measures	2004/05 Actual	2005/06 Actual	2006/07 Target	2006/07 Actual
Degree completion rate:				
• Percentage of university direct entry students that complete baccalaureate degrees within 7 years of admission	71.7 %	74.1 %	≥ 74.1 %	73.0 % Substantively Achieved
• Percentage of university transfer students that complete baccalaureate degrees within 5 years of admission to university	72.7 % [1]	75.2 % [1]	≥ 75.2 %	73.3 % Substantively Achieved

Data Source: Institutions' administrative systems. Data provided via The University Presidents' Council of British Columbia.

[1] Figure was revised due to University of British Columbia providing the ministry with revised data in fall 2006.

Discussion of Results

This measure is intended to indicate the ability of B.C. public universities to deliver degree programs to students in an efficient and timely manner. This is a measure of whether or not students complete their educational programs in a reasonable amount of time; that is, seven years for direct entry students and five years for transfer students. The target was substantively achieved. The 2006/07 results are higher than the 2004/05 results, but lower than the 2005/06 results. Only four universities (University of British Columbia, Simon Fraser University, University of Victoria, and University of Northern British Columbia) contribute to this measure, and not all institutions showed a decline over last year's results. The Ministry will monitor the system and institutional trends and take action if the results continue decreasing. As noted previously, a prosperous provincial economy attracts many students to the workforce before program completion.

Objective 1.4: Quality

- Achieving this objective means that B.C.'s post-secondary students are assured of a high standard of excellence in the education and training they receive and that the needs of students, employers and citizens are met.
- Challenges associated with this objective are ensuring that information is collected at a level of detail that makes it useful with post-secondary educational institutions and that it is then used so that the quality of education and training programs is managed.

Strategies

- **Collect and provide quality monitoring and improvement information.** System-wide and institution specific surveys on student outcomes (at university, college, university college, and institute levels) are conducted regularly at public institutions.
- **Ensuring quality of institutions.** Quality in private and public degree granting institutions and their programs is addressed by the Degree Quality Assessment Board [10] and by institutional internal and external review processes. Accredited private career training institutions adhere to quality assurance standards established by the Private Career Training Institutions Agency.[11] The Board and the Agency work directly with institutions to improve these standards continually and monitor their quality assurance practices. As well, in 2006/07, the Ministry implemented the Designation Policy Framework for Student Financial Assistance.[12] The loan default rates and portfolio default performances were sent to presidents of all post-secondary institutions in B.C., whose students are eligible for government loans, in November 2006. This included putting on notice those institutions whose default rates were unacceptably high.
- **Provide oversight and input into quality review processes.** The Ministry oversees quality review processes for private and public degree-granting institutions to safeguard the public interest. The Ministry continued to work with the Degree Quality Assessment Board, the Private Career Training Institutions Agency, and other stakeholders to improve the quality of and confidence in B.C.'s private and public post-secondary education system further. Following consultation with post-secondary institutions and stakeholders, the Degree Quality Assessment Board recommended changes to the application and review process, and the criteria used to assess new degree programs and organizations. The Ministry accepted the Board's recommendations and implemented changes to the process and criteria to make it more accountable and transparent.

---

[10] The Board scrutinizes new degree proposals and requests to use the word "university," according to an established quality assessment process, before recommending Ministerial approval. Standards for the organizational review of private and out-of-province public degree granting institutions are established by the Minister.

[11] The Agency provides consumer protection to students of registered institutions; establishes standards of quality that must be met by accredited institutions; and established and manages the Student Training Completion Fund. In the event of an institutional closure, students can make a claim to the Agency to complete their studies at another institution, or for a refund of the unspent portion of their tuition through the Student Training Completion Fund.

[12] Designation is the process through which post-secondary educational institutions become eligible for government financial assistance programs for students, meaning that students at those institutions are eligible to apply for financial aid. Through the Framework, the Ministry requires designated private and public institutions, whose former students have a poor (28% or greater) B.C. student loan default rate, to provide improvement plans that outline changes they will make to current practices to ensure significant improvement in their default rates. Improvement plans focus on improving student success, which research has found to be a prerequisite to student loan repayment.

Performance Results

Performance Measures	2004/05 Actual	2005/06 Actual	2006/07 Target	2006/07 Actual
Student assessment of quality:				
• Overall satisfaction:				
• Former diploma, certificate and associate degree students			≥ 90 %	95.1 % Achieved
• Baccalaureate graduates	Data not comparable due to change in data collection	Data not comparable due to change in data collection	≥ 90 %	95.8 % Achieved
• Skill development:				
• Former diploma, certificate and associate degree students			≥ 85 %	79.9 % Substantively Achieved
• Baccalaureate graduates			≥ 85 %	82.5 % Substantively Achieved

Data Source: Former diploma, certificate and associate degree students data are from the 2006 B.C. College and Institute Student Outcomes Survey. Baccalaureate graduates data are from the 2006 Baccalaureate Graduate Survey and B.C. College and Institute Student Outcomes Survey. Margins of error are within plus or minus one per cent. See also Technical Note #6 at the end of the Goals, Objectives, Strategies and Performance Results section for more information.

Discussion of Results

As the recipients of post-secondary education, former students are well-suited to assess the quality of education they received. The measure itself has not changed from the *2006/07 Service Plan*. However, the surveys' methodologies have changed: the Ministry now requires that all baccalaureate graduates are surveyed using the same questionnaire. As of the 2006 survey year, baccalaureate graduates from all public institutions are surveyed in the Baccalaureate Graduate Survey. Previously, any baccalaureate graduates from colleges, university colleges and institutes were surveyed with certificate, diploma and associate degree students at those institutions. As a result, student outcomes data in this report can no longer be presented by sectors — i) former college, university college and institute students and ii) former university baccalaureate graduates. The data is now presented by student qualification — i) former diploma, certificate and associate degree students and ii) baccalaureate students.

Overall satisfaction of former diploma, certificate and associate degree students, and baccalaureate graduates, targets were achieved. Skill development of former diploma, certificate and associate degree students, and baccalaureate graduates, targets were substantively achieved. Of the seven skill areas assessed, critical thinking, group collaboration, reading comprehension, and learning on your own came close to the target. Oral communication, problem solving, and written communication were lower, leading to the 'substantively achieved' status. As this is the first year the results have been examined by student qualification this result will be monitored in the coming years.

Objective 1.5: Relevance

- Achieving this objective will ensure that education and training offered through the post-secondary education system are relevant to the knowledge, skills and abilities needed in the labour market.
- A challenge associated with this objective is enhancing the relevance and responsiveness of the post-secondary education system — to address the current needs of students and employers by providing the appropriate array of programs, with the scope and breadth of education and training — to meet the demands of a dynamic provincial economy. This includes addressing skill shortages in certain highly skilled occupations and in rural and northern areas.

Strategies

- **Conduct analysis of labour market and socio-economic trends.** The Ministry conducts research and analysis of labour market, social and economic trends, to produce relevant information to support training and education strategies. The findings of the Ministry's occupational research are available to students to support career planning and education and training decision-making at http://www.aved.gov.bc.ca/labourmarketinfo/careers.htm.
- **Build linkages between the post-secondary education system and industry.** The Ministry supported initiatives to ensure that up-to-date information needed by employers and entrepreneurs in a modern economy are provided by public post-secondary institutions. For example, the Ministry provided $150,000 in 2006/07 to two Centres for Leadership and Innovation — Tourism hosted at Capilano College and Hospitality hosted at Vancouver Community College. The B.C. Aerospace Consortium completed a detailed labour market survey of aircraft maintenance firms to identify projected labour market demand to 2015. The Oil and Gas Education and Training Consortium submitted its report to government that included recommendations to address skill shortages in the oil and gas industry.[13] A new Oil and Gas Industry Training Centre of Excellence is designed to accommodate a full range of oil and gas related programs with priority programs to address the current and projected skill shortages.[14] Malaspina University College and North Island College worked closely with the B.C. Forest Safety Council in conjunction with their local/regional forestry companies on Vancouver Island, to offer the pilot deliveries of the Council's new Faller Certification Training program.[15]

[13] The Consortium has representation from the corporate and service oil and gas industry, as well as stakeholders from Aboriginal groups, education and government. Many of these recommendations are reflected in the government's 2007 B.C. Energy Plan.

[14] The Centre is located at the Fort St. John Campus of Northern Lights College. To ensure the programs are relevant to the skilled labour needs of the industry, they will be developed and updated, under advice from the industry advisory committee for each program.

[15] Programs such as this one, that prepare graduates for direct entry to employment, are developed and updated on an on-going basis, under the advice from the industry advisory committee established by the institutions for each program.

Performance Results

Performance Measures	2004/05 Actual	2005/06 Actual	2006/07 Target [1]	2006/07 Actual
Student outcomes — unemployment rate				
i. Former diploma, certificate and associate degree students	Data not comparable due to change in data collection	Data not comparable due to change in data collection	≤ 7.6 %	6.3 % EXCEEDED
ii. Baccalaureate graduates			≤ 7.6 %	3.9 % EXCEEDED

Data Source: Former diploma, certificate and associate degree students data are from the 2006 B.C. College and Institute Student Outcomes Survey. Baccalaureate graduates data are from the 2006 Baccalaureate Graduate Survey and B.C. College and Institute Student Outcomes Survey. See also Technical Note #6 at the end of the Goals, Objectives, Strategies and Performance Results section for more information.

[1] 2006 B.C. unemployment rate for population aged 18 – 29 with high school credentials or less.

Discussion of Results

This measure provides some indication of how successful former students were in making the transition from post-secondary education to employment. To accomplish this, the measure compares former post-secondary students and graduates unemployment rates with the unemployment rate for British Columbians with high school credentials or less. The measure itself has not changed from the *2006/07 Service Plan.* However, the surveys' methodologies have changed: the Ministry now requires that all baccalaureate graduates are surveyed using the same questionnaire. As of the 2006 survey year, baccalaureate graduates from all public institutions are surveyed in the Baccalaureate Graduate Survey. Previously, any baccalaureate graduates from colleges, university colleges and institutes were surveyed with certificate, diploma and associate degree students from those institutions. As a result, student outcomes data in this report can no longer be presented by sectors — i) former college, university college and institute students and ii) former university baccalaureate graduates. The data is now presented by student qualification — i) former diploma, certificate and associate degree students and ii) baccalaureate students.

For both former diploma, certificate and associate degree students, and for baccalaureate students, the targets were exceeded. The target has been reached for the last few years.

Ministry Response

It is likely that the strong economy is contributing to the results for this measure: employers are seeking more trained workers, and in turn students are finding work more easily.

Goal 2: Excellent research and innovation that supports economic and social development

Approval of a Research and Innovation Strategy early in 2007 will involve a range of research measures being examined. This may lead to changes in the research measures in the service plan and service plan report in future years.

Objective 2.1: Research Capacity

- Achieving this objective will ensure that researchers in B.C. have the resources and facilities necessary to fulfill the Ministry's research goal.
- Challenges associated with this objective are the longer nature of the research cycle, often more than one year, and the difficulty of obtaining data on research capacity in university colleges, colleges, institutes, non-profit research organizations, and the private sector.

Strategies

- **Provide administrative and technical infrastructure funding support, as well as research funding support.** The Ministry provides operating grants to the public universities, portions of which the universities dedicate to research activity. As well, funding of $32 million was provided to public post-secondary institutions through the British Columbia Knowledge Development Fund,[16] the province's major research infrastructure program. The Ministry continued to fund BCNET[17] for enhancement and expansion by providing $300,000 to the B.C. Institute of Technology Aerospace and Technology campus at Sea Island, Richmond. Development continued on the Natural Resources and Applied Science Research Endowment,[18] the Technology Action Plan[19] and Life Sciences Action Plan.[20] Support to graduate students was enhanced by providing over $20 million for new scholarships and internships.

[16] The British Columbia Knowledge Development Fund provides public post-secondary institutions, teaching hospitals and affiliated non-profit agencies with capital funding for research equipment and facilities. The program is designed to expand and improve B.C.'s research infrastructure.

[17] BCNET is a not-for-profit society formed to provide high-speed optical network capabilities — often called advanced networking — to B.C.'s post-secondary education and research institutions.

[18] The Endowment supports research in engineering, natural resources and the applied sciences.

[19] The Technology Action Plan addresses the development of technology industries across the province.

[20] The Life Sciences Action Plan will define and coordinate implementation of strategic objectives for B.C.'s life sciences sector.

- **Support and oversee research organizations.** The Ministry continued to be the provincial liaison for the Leading Edge Endowment Fund.[21] As well, the Ministry provided over $7 million to the B.C. Innovation Council.[22]

Performance Results

Performance Measure	2004/05 Actual	2005/06 Actual	2006/07 Target	2006/07 Actual
Research capacity:				
Sponsored research funding from all sources:	Total: $472 M	Total: $495 M	Total: ≥ $495 M	Total: $507 M ACHIEVED
• Federal	$229 M	$248 M	≥ $248 M	$299 M EXCEEDED
• Provincial	$ 84 M	$ 90 M	≥ $ 90 M	$ 36 M NOT ACHIEVED
• Other	$159 M	$157 M	≥ $ 157 M	$172 M ACHIEVED
British Columbia proportion of federal awards	11.8%	10.6 %	≥ 10.6%	12.2 % EXCEEDED
Highly qualified personnel:				
• Number	N/A	17,881	≥ 17,881	19,391 ACHIEVED
• Number per 1,000 population	N/A	4.2 / 1,000	≥ 4.2 / 1,000	4.5 / 1,000 ACHIEVED

Data Source: Data for sponsored research funding and B.C. proportion of federal awards is obtained from the Canadian Association of Business Officers, and reflect revenue reported by public post-secondary institutions to the association, for two years previous. Therefore, 2004/05 actual reflects 2002/03 academic year data. Data for highly qualified personnel is provided by the universities and is for the 2004/05 academic year. See also Technical Note #7 at the end of the Goals, Objectives, Strategies and Performance Results section for more information.

Discussion of Results

The outcome being assessed by the measure is the resources that public universities have at their disposal for research and innovation. The total target for sponsored research funding was achieved. The 'federal funding' target was exceeded, the 'provincial funding' target was not

[21] The Leading Edge Endowment Fund was established in 2002, to create 20 leadership chairs in research. The province provided $45 million ($2.25 million for each chair) — with matching funds to be secured by post-secondary institutions from external partners. An additional $11.25 million was provided in 2003 and 2004 to create nine regional innovation chairs.

[22] The Ministry assumed authority for the British Columbia Innovation Council on June 16, 2005, when the Ministry's mandate was expanded to include responsibility for research and technology. The Council is a Crown agency, which supports the transfer of leading-edge research into industry and accelerates commercialization of world-class technology-based products for the economic benefit of B.C.

achieved, and the 'other funding' target was achieved. The proportion of federal awards was achieved. The number of highly qualified personnel and number per 1,000 population targets were also achieved.

Ministry Response

Sponsored research funding from provincial sources was not achieved due to a change in cash flow from the B.C. Knowledge Development Fund, which had a large impact on provincial research funding. Funding for approved projects generally flows over several years, with the first years following awards showing the highest cash flow. The previous two fiscal years represent high cash flow years for the Fund, with the current reporting year reflecting a low cash flow year. Strategies will remain the same.

Objective 2.2: Research Relevance

- Achieving this objective will ensure that research activity in B.C. produces results with relevant social and economic benefits.
- Challenges associated with this objective are the longer nature of the research cycle, often more than one year, and how to determine whether proposed research has relevance.

Strategies

- **Contribute funding and support.** The Ministry funded and supported research at public post-secondary institutions through operating grants, and provided $32 million through the B.C. Knowledge Development Fund. As noted in strategies of the previous objective, the Ministry also contributed over $7 million to the B.C. Innovation Council.

Performance Results

Performance Measures	2004/05 Actual	2005/06 Actual	2006/07 Target	2006/07 Actual
Number of licences, patents and start-up companies:				
• Licence/option agreements	50	63	≥ 63	53 Not Achieved
• U.S. patents issued	27	26	≥ 26	38 Exceeded
• Start-up companies	17	9	≥ 9	11 Exceeded
• Licence income received	$13.8 M	$14.6 M	≥ $14.6 M	$15.6 M Achieved

Data Source: Data for this measure is based on administrative data provided by British Columbia's three largest universities, University of British Columbia, Simon Fraser University and University of Victoria. Due to the nature of the research cycle, there is a time lag for the actual data. Therefore, 2004/05 actual reflects 2002/03 academic year data.

Discussion of Results

The outcome being assessed by this measure is the commercial applications that result from research at public post-secondary institutions. The measure does not reflect the many non-commercial benefits of post-secondary research activity nor the indirect economic benefits generated by start-up companies. These aspects are important but difficult to quantify.

The target was not achieved for number of licence/option agreements. The 2006/07 target was at least 63 agreements should be made; however, only 53 were actually entered into. All other targets were achieved or exceeded. The number of US patents registered was 38 which exceeded the target of 26. There were 11 start-up companies which exceeded the target of nine, and licence income was $15.6 million for 2006/07 above the target of $14.6 million.

Ministry Response

The target for licence/option agreements was not achieved because the previous fiscal year appears to represent an exceptional year for licence/option agreements, with the current year returning to a number more consistent with years past. The small overall numbers reported also exaggerate the percentage variation between years. Strategies will remain the same.

Technical Notes

1. *The 'student spaces in public institution' measure and sub-measures are calculated as Full-Time Equivalent (FTE) student spaces. The targets are the spaces that the Ministry funds, and the actuals are the spaces that are filled at the institutions. The utilization rate is a ratio of actual to targeted Full-Time Equivalents.*
2. *The 'total credentials awarded' measure includes all credentials awarded for all programs that lead to a formal qualification (as opposed to a certificate of attendance) at all public post-secondary institutions. This includes all forms of post-secondary education from vocational training to graduate programs. The measure is based on a three average of credentials awarded in the academic year (September to August). For example, data for 2006/07 fiscal year is an average of 2003/04, 2004/05, and 2005/06 academic years.*
3. *Public post-secondary participation rate for population aged 18–29 captures participation of those attending public post-secondary institutions only, not private institutions. Results for the 2006/07 fiscal year represent data from the 2005/06 academic year (September 2005 to August 2006).*
4. *Data for the 'public post-secondary students who are Aboriginal' measure are based on headcount enrolment in the academic year.*
5. *The 'student spaces in developmental programs' measure is calculated as student Full-Time Equivalents. Developmental programs are Adult Basic Education, English as a Second Language, and Adult Special Education.*
6. *For both the 'student assessment of quality' and 'student outcomes — unemployment rate' measures, as of the 2006 survey year, baccalaureate graduates from all public institutions are surveyed in the Baccalaureate Graduate Survey. Previously, any baccalaureate graduates from colleges, university colleges and institutes were surveyed with certificate, diploma and associate degree students at those institutions. Therefore, comparisons with earlier years are not recommended. The category "former diploma, certificate and associate degree students" includes former students from all non-baccalaureate programs.*
7. *Highly qualified personnel include faculty, graduate students and post-doctoral fellows. Although the university colleges, colleges and institutes conduct applied research in British Columbia and have significant numbers of highly qualified personnel, this measure includes only the research universities (University of British Columbia, Simon Fraser University, University of Victoria and University of Northern British Columbia). This measure was introduced in 2006/07, so data is not available from 2004/05.*

Report on Resources

Resource Summary

	Estimated[1]	Other Authorizations[2]	Total Estimated	Actual	Variance
Operating Expenses ($000)					
Educational Institutions and Organizations	1,529,826	45,791	1,575,617	1,589,372	13,755
Student Financial Assistance	158,383		158,383	143,307	(15,076)
Debt Service Costs and Amortization of Prepaid Capital Advances	268,161		268,161	259,608	(8,553)
Research and Innovation	5,741	1,361	7,102	15,669	8,567
Executive and Support Services	19,596	306	19,902	21,209	1,307
Total Operating Expenses before Adjustment of Prior Year's Accrual	**1,981,707**	**47,458**	**2,029,165**	**2,029,165**	**0**
Adjustment of Prior Year's Accrual[3]				(2,292)	(2,292)
Total Operating Expenses after Adjustment of Prior Year's Accrual	**1,981,707**	**47,458**	**2,029,165**	**2,026,873**	**(2,292)**
Full-time Equivalents (Direct FTEs)					
Executive and Support Services	219		219	209	(10)
Total	**219**		**219**	**209**	**(10)**
Ministry Capital Expenditures (Consolidated Revenue Fund) ($000)					
Executive and Support Services:					
Information Systems	1,246		1,246	320	(926)
Furniture and Equipment	75		75	25	(50)
Tenant Improvements	150		150	0	(150)
Total	**1,471**		**1,471**	**345**	**(1,126)**
Capital Plan ($000)					
Educational Institutions and Organizations:					
Prepaid Capital Advances	267,280		267,280	267,271	(9)
Total	**267,280**		**267,280**	**267,271**	**(9)**

	Estimated[1]	Other Authorizations[2]	Total Estimated	Actual	Variance
Other Financing Transactions ($000)					
Student Financial Assistance — BC Student Loan Program:					
Total Receipts	56,186		56,186	57,416	(1,230)
Total Disbursements	306,900		306,900	200,043	(106,857)
Total Net Cash Source (Requirements)	**(250,714)**		**(250,714)**	**(142,627)**	**(108,087)**

[1] The "Estimated" amount corresponds to the *Estimates* as presented to the Legislative Assembly in February 2006.

[2] The Ministry accessed government contingency for $47.458 million to fund negotiation settlements and a portion of Wireless Innovation Network Laboratory.

[3] As in accordance with Generally Accepted Accounting Principles (GAAP), this amount reflects an adjustment of prior year's expense accrual. These dollars are not available for Ministry spending.

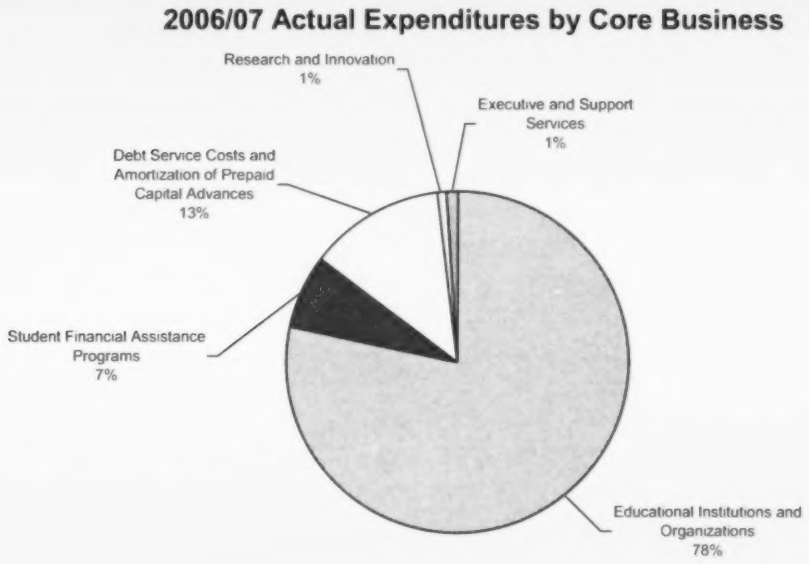
- **Educational Institutions and Organizations** provides funding to universities, university colleges, colleges, institutes, educational agencies, and other organizations to support the post-secondary education system. This business area also provides transfers for research, scholarships, bursaries, and other initiatives related to post-secondary education. Recoveries are received from the federal government in accordance with federal/provincial agreements.
- **Student Financial Assistance** provides for financial, income and other assistance to and for students including interest on student loans issued by financial institutions under these programs, debt service costs on loans issued by the province, provisions for future liabilities on student loans, transfers to students, and transfers for initiatives that enhance student performance. Recoveries are received from students for student loan interest repayments.
- **Debt Service Costs and Amortization of Prepaid Capital Advances** provides for the payment of short and long-term debt service costs for approved capital projects including new buildings, equipment, renovations, and improvements to existing university, university college, college, institute and agency facilities, and interest payments on matching funds relating to the Canada Foundation for Innovation Program for research infrastructure projects. Sinking fund assets, which are used to retire existing debt obligations, earn interest that is netted against debt service costs. This business area also provides for amortization of funds advanced for capital projects including new buildings, renovations and improvements, and equipment purchases.
- **Research and Innovation** provides funding to support research and innovation including grants to the BC Innovation Council. This business area also provides funding to support the Premier's Technology Council.

- **Executive and Support Services** provides for ministry leadership and direction, establishment of policy and accountability, and provides program support for the post-secondary system. This business area also provides for consumer protection with respect to private post-secondary institutions and quality assessment for public and private post-secondary degree granting institutions. This business area also provides for the office of the Minister of Advanced Education, and includes salaries, benefits, allowances, and operating expenses for the minister and for the minister's staff. Transfers are provided for post-secondary development and implementation activities, research, labour market initiatives, and national and international education initiatives. Recoveries are received from participation in federal/provincial agreements and activities, and for ministry services provided for in this business area. Financial, human resources, information resources,[23] administrative, freedom of information and privacy, and general services and assistance are provided to the Ministry of Advanced Education by the Ministry of Education, Management Services Division.

The Ministry spent $2 billion in operating expenses during the 2006/07 fiscal year. Educational Institutions and Organizations was over spent due to a one time unplanned payment to the college sector. Student Financial Assistance was under spent due to actual loan disbursements being less than anticipated, and more than forecast interest recovery due to higher than projected student loan repayment rates. Research and Innovation was over spent due to an internal ministry reorganization that redirected emphasis and funding to this core business. Debt Services is managed by the Ministry of Finance.

[23] Information technology services, including workstation and software support for Ministry staff, all Ministry computer applications, e.g., Student Financial Aid System and PLNet, the underlying network infrastructure used by all colleges and college universities, are provided through the Knowledge Management Division of the Ministry of Education.

Ministry Expenses by Core Business



Income Statement for Universities and Colleges

Public Post-Secondary Institutions	2006/07 Budget	2006/07 Actual	Variance
Combined Income Statement ($000)			
Total Revenue	3,830,095	4,160,060	329,965
Total Expense	3,812,504	3,934,332	- 121,828
Operating Results	17,591	225,728	208,137
Gain (Loss) on sale of Capital Assets (if applicable)	0	0	0
Net Results	17,591	225,728	208,137

Ministry Contact Information

Service	Ministry Branch/ Agency	Telephone/Fax	E-mail/Website
Student loans, grants, bursaries, scholarships, and special programs	StudentAid BC	Telephone: 250 387-6100 Telephone: B.C. Lower Mainland: 604 660-2610 Telephone: Anywhere else in Canada/U.S. (toll-free): 1 800 561-1818 TTY line for deaf and hearing impaired: 250 952-6832 Facsimile: 250 356-9455	http://www.studentaidbc.ca
Degree Authorization Act	Degree Quality Assessment Board Secretariat	Telephone: 250 387-5163 Facsimile: 250 356-8851	AVED.DQABsecretariat@gov.bc.ca http://www.aved.gov.bc.ca/degree-authorization/board/welcome.htm
Private Career Training Institutions Act	Private Career Training Institutions Agency	Telephone: 604 660-4400 Telephone: 1 800 661-7441 Facsimile: 604 660-3312	info@pctia.bc.ca http://www.pctia.bc.ca/

Annual Service Plan Report Appendices

Appendix A

Legislation: http://www.aved.gov.bc.ca/publications/legislation.htm

BC Innovation Council: http://www.bcinnovationcouncil.com/index.php

Appendix B: Report on Accountability Framework Measures

Institutions submit data on measures in the Accountability Framework that are not included in the Ministry Service Plan, but that provide additional contextual information.

Annual educational activity occurring between May and August

The Ministry is committed to ensuring public post-secondary institutions maximize the efficient use of existing publicly-funded facilities before additional funds are allocated for capital expansion. One of many possible ways to increase efficiency is to promote the year-round use of facilities for student instruction. For many reasons, the period of May through August has historically been a time of reduced instructional activity at most institutions (although it may also be a period of increases in other types of activity such as research). For those institutions that are able to offer more instructional activity during this period, doing so may ease some of their difficulty meeting student demand during the fall and winter and may result in more efficient use of resources and capacity.

This measure is intended to provide an indication of overall system progress in this regard. It is the percentage of annual instructional activity conducted during the summer academic period compared to the fall and winter academic periods. It is determined using data from public post-secondary institutions. Universities provide data showing equivalent enrolments taught (EETs) through The University Presidents' Council of British Columbia; colleges, university colleges and institutes provide student contact hour data to the Ministry. The rate is calculated by taking the program activity that occurs in the months May to August and dividing it by the total annual activity.

Sector	2001/02 Academic Year	2002/03 Academic Year	2003/04 Academic Year	2004/05 Academic Year	2005/06 Academic Year
University	15.2%	15.8%	15.9%	15.5%	15.3%
College	11.5%	13.1%	14.2%	14.2%	14.2%
System total	13.3%	14.4%	15.0%	14.9%	14.7%

As can be seen in the table above, the percentage of activity happening during the May to August time period has decreased slightly from the previous academic year, but has increased by 1.4 percentage points since the 2001/02 academic year.

Quality of Instruction

This measure is the percentage of former public post-secondary students who, when surveyed, rated the quality of instruction in their education program as very good or good. It is based on data obtained from annual student outcomes surveys.

Decisions concerning instructional policies and procedures are made exclusively by institutions. Consequently, beginning with the 2005/06 fiscal year, this measure is no longer included in the Ministry Service Plan, although it has been retained as a measure for institutional service plans issued under "An Accountability Framework for British Columbia's Public Post-Secondary Education System."

The latest data show that former students continue to rank quality of instruction high. Due to differences in the scales, no comparison should be made between the results. Specifically, former diploma, certificate and associate degree students were asked to rate their quality of instruction on the following 5 point scale: Very Good, Good, Adequate, Poor, and Very Poor. College and institute respondents also had the option to respond "Not Applicable," "Don't Know," and "Refused." On the other hand, the Baccalaureate graduates were asked to rate their quality of instruction on the following 4 point scale: Very Good, Good, Poor, and Very Poor. These respondents also had the option to respond "Don't Know" and "Refused."

Survey Year	Former diploma, certificate and associate degree students	Baccalaureate graduates
2006	84.4%	95.3%

Data Source: Former diploma, certificate and associate degree students data are from the 2006 B.C. College and Institute Student Outcomes Survey. Baccalaureate graduates data are from the 2006 Baccalaureate Graduate Survey and B.C. College and Institute Student Outcomes Survey. Margins of error are within plus or minus one per cent. See also Technical Note at the end of Appendix B.

Student assessment of usefulness of knowledge and skills in performing job

For many people, a primary reason for pursuing post-secondary education is to enhance their employability with the hope that it will lead to a fulfilling career. It is, therefore, important for the Ministry and post-secondary institutions to ensure that education programs are relevant, imparting knowledge and skills that students will need once they enter the labour market.

This measure provides an indication of the relevance of the public post-secondary system to the labour market from the perspective of former students. As the recipients of post-secondary education, former students are well-suited to comment on its relevance to their employment. This measure is the percentage of former students who, when surveyed, indicated that the knowledge and skills they acquired through their education was very useful or somewhat useful in performing their jobs.

Survey Year	Former diploma, certificate and associate degree students	Baccalaureate graduates
2006	77.5%	87.9%

Data Source: Former diploma, certificate and associate degree students data are from the 2006 B.C. College and Institute Student Outcomes Survey. Baccalaureate graduates data are from the 2006 Baccalaureate Graduate Survey and B.C. College and Institute Student Outcomes Survey. Margins of error are within plus or minus one per cent. See also Technical Note at the end of Appendix B.

Student satisfaction with transfer

This measure indicates how well the transfer system has integrated post-secondary education in British Columbia. It is based on evaluation by students of their experience with the transfer system, and is obtained through the B.C. College and Institute Student Outcomes Survey.

Survey Year	Former diploma, certificate and associate degree students
2006	88.4%

Data Source: Former diploma, certificate and associate degree students data are from the 2006 B.C. College and Institute Student Outcomes Survey. Margins of error are within plus or minus one per cent. See also Technical Note at the end of Appendix B.

Technical Note

For the three student outcomes measures (satisfaction with instruction, student assessment of usefulness of knowledge and skills in performing job, and satisfaction with transfer), as of the 2006 survey year, baccalaureate graduates from all public institutions are surveyed in the Baccalaureate Graduate Survey. Previously, any baccalaureate graduates from colleges, university colleges and institutes were surveyed with certificate, diploma and associate degree students at those institutions. Therefore, comparisons with earlier years are not recommended. The category "former diploma, certificate and associate degree students" includes former students from all non-baccalaureate programs.